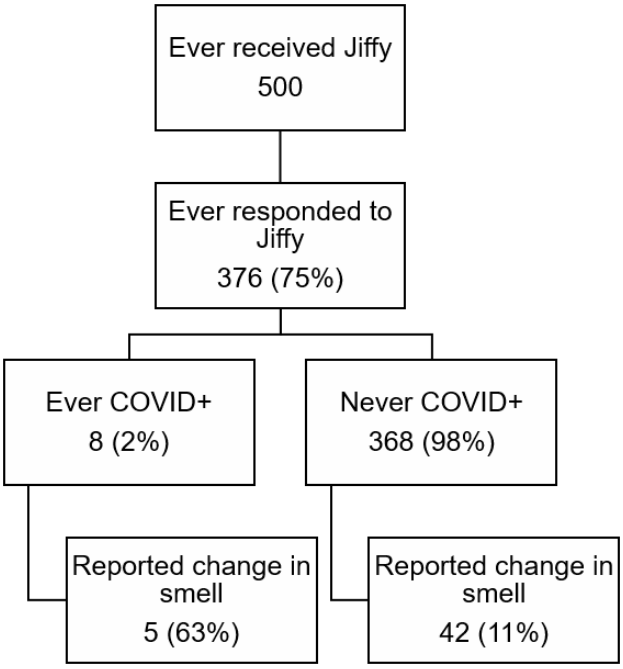
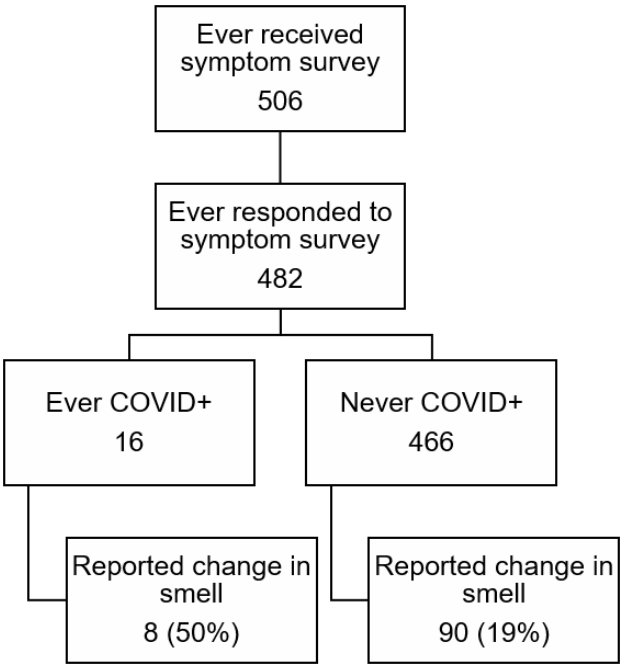
(60%), versus slight (88%) and moderate (12%) in COVID- HCW. 16/17 COVID+ HCW completed a daily symptom survey (mean 14 times/HCW), with 8/16 (50%) ever reporting parosmia versus 90/466 (19%) of COVID- HCW (OR=4.2, 95% CI: 1.3–13, *p*=.007). Overall, parosmia was the first reported symptom in 3/13 (23%) COVID+ HCW who reported symptoms.

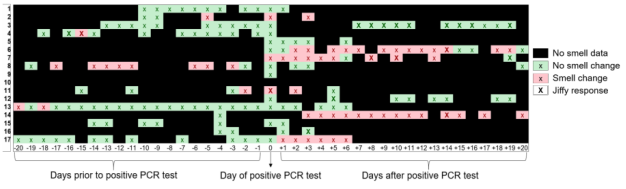
Smell Changes in COVID+ and COVID- HCW Reported in the "Jiffy" Test



Smell Changes in COVID+ and COVID- HCW Reported in Daily Symptom Questionnaire



Smell Changes among COVID+ HCW by Day, Relative to Day of Positive PCR Test



Conclusion: We conducted a prospective study of smell testing in a population at high risk for COVID-19 using two parallel approaches. Our results demonstrate the feasibility of at-home smell testing for assessing parosmia during COVID-19, in some cases even prior to a positive PCR result. Given the urgent need for widespread, low-cost, non-invasive testing for COVID-19, we are now developing an easy-to-use app to distribute this survey more widely to high-risk populations.

Disclosures: **Julian J. Weiss, BA**, Nothing to disclose

457. Low Rates of COVID-19 in a Vulnerable Population: Learning from Early and Decisive Public Health Policies

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St. Paul's Hospital COVID-19 Research Group

Session: P-14. COVID-19 Epidemiology and Screening

Background: Disasters, including pandemics, disproportionately affect vulnerable populations. The Downtown Eastside (DTES) neighborhood of Vancouver has high prevalence of mental illness, substance use, infectious disease and homelessness. While studies have described clinical characteristics of COVID-19 patients in other centres worldwide, data is lacking on marginalized groups. We describe the clinical characteristics and outcomes of COVID-19 patients seen at two urban hospitals who care for the vulnerable population in the DTES of Vancouver, British Columbia (BC), Canada.

Methods: A retrospective chart review was conducted on all COVID-19 patients ≥19 years seen at either centre from January 1 to June 10, 2020. Descriptive statistics assessed demographics, comorbidities, presenting symptoms, laboratory values and outcomes, and were compared between subjects managed as inpatients (died vs. discharged) and outpatients.

Results: Of 71 COVID-19 subjects, mean age was 57y (SD 20); 36 (51%) were male. Time to presentation, symptoms and laboratory values were similar to other reports. 58 (82%) presented from the community, 3 (4%) from long-term care/rehabilitation centres, and 8 (11%) had no fixed address (NFA) or lived in the DTES. 45 (64%) had a known exposure, 20 (28%) were healthcare workers, 85% involved in direct patient care; 0/20 were admitted to hospital. Of the 8 NFA/DTES subjects, mean age was 46y (SD 13), 50% were male, 5 (63%) were admitted to hospital and all survived.

Admitted subjects (n=34) were older (mean age 69 vs 46y, p< 0.001), 62% were male, and had more comorbidities (mean [SD] 3 [3] vs. 1 [2], p< 0.001). Eight (24%) died, 26 (76%) were discharged, 29% developed acute respiratory distress syndrome, 21% secondary infection, 18% renal failure, and 15% cardiac dysfunction. Of patients admitted to intensive care, 5/10 died.

Conclusion: Our results concur with other studies showing older age and comorbidities contribute to more severe COVID-19 disease. 64% of subjects had a known exposure, and only 11% had NFA/DTES residence. Given that there is no financial barrier to access healthcare in Canada and these hospitals serve our most vulnerable populations, our results may indicate that BC Public Health has done an effective job of tracking and limiting community spread of COVID-19.

Disclosures: **All Authors**: No reported disclosures

458. Molecular SARS-CoV-2 Testing During the COVID-19 Outbreak: Experiences of a Hospital in Southeast Michigan, USA

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Session: P-14. COVID-19 Epidemiology and Screening

Background: The novel Coronavirus SARS CoV-2 (COVID-19) outbreak was complicated by the lack of diagnostic testing kits. In early March 2020, leadership at Beaumont Hospital, Royal Oak Michigan (Beaumont) identified the need to develop high capacity testing modalities with appropriate sensitivity and specificity and rapid turnaround time. We describe the molecular diagnostic testing experience since initial rollout on March 16, 2020 at Beaumont, and results of repeat testing during the peak of the COVID-19 pandemic in MI.

Methods: Beaumont is an 1100 bed hospital in Southeast MI. In March, testing was initially performed with the EUA Luminex NxTAG CoV Extended Panel until March 28, 2020 when testing was converted to the EUA Cepheid Xpert Xpress SARS-CoV-2 for quicker turnaround times. Each assay was validated with a combination of patient samples and contrived specimens.

Results: During the initial week of testing there was > 20 % specimen positivity. As the prevalence grew the positivity rate reached 68% by the end of March (Figure 1). Many state and hospital initiatives were implemented during the outbreak, including social distancing and screening of asymptomatic patients to increase case-finding and prevent transmission. We also adopted a process for clinical review of symptomatic patients who initially tested negative for SARS-CoV-2 by a group of infectious disease physicians (Figure 2). This process was expanded to include other trained clinicians